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EXAMINER	
WASSUM, LUKE S	

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/858,438	RYAN ET AL.	
	Examiner	Art Unit	
	Luke S. Wassum	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Applicants' amendment, filed 16 December 2005, has been received, entered into the record, and considered.

2. As a result of the amendment, claims 1, 27, 28 and 30 have been amended. Claims 1-30 remain pending in the application.

The Invention

3. The claimed invention is a method and structure for a virtual finishing job ticket database used in a finishing system wherein the database stores capability and constraint information relating to finishing devices available for a finishing job.

Priority

4. The Applicants' claim to priority under 35 U.S.C. 119(e), based upon provisional application number 60/204,720, filed 16 May 2000, is acknowledged.

Claim Objections

5. In view of the amendment to claim 30, the objection to this claim has been withdrawn.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or

with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 28-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

8. Regarding claim 28, the Applicants have changed the limitation wherein integrity data confirms that a job finishes in accordance with job construction data to ensuring that a job finished in accordance with job *control* data. This change constitutes new matter. The Applicants are requested to specify where in the specification (or even in the provisional patent application relied upon for priority) support for this change can be found.

9. Claims 29 and 30, fully incorporating the deficiency of their parent claim 28, are likewise rejected.

Claim Rejections - 35 USC § 101

10. In view of the amendment to claim 28, the rejection of this claim under 35 U.S.C. § 101 has been withdrawn.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by **Marlin et al.** (U.S. Patent 5,778,377).

13. Regarding claim 1, **Marlin et al.** teaches a method for a virtual finishing job ticket database as claimed, comprising:

a) storing in the database a list of capability, temporary and permanent constraint attributes for each available finishing device (see finishing object 40 in Figure 7; see also col. 11, lines 21-27; see discussion of temporary constraints at col. 11, lines 36-40 and 45-49);

b) receiving finishing job description information, including descriptions of job segments of the job that conform to the capability, temporary and permanent constraint attributes of the finishing device (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18; see discussion of temporary constraints at col. 11, lines 36-40 and 45-49); and

c) storing the finishing job description information in the database (see object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

14. Regarding claim 27, **Marlin et al.** teaches a method for a database system, comprising:

a) storing capability, temporary and permanent constraint attributes in the database (see finishing object 40 in Figure 7; see also col. 11, lines 21-27; see discussion of temporary constraints at col. 11, lines 36-40 and 45-49);

b) communicating the capability, temporary and permanent constraint attributes to the production monitor controller (see disclosure of the interface to the Management Information Format (MIF) file, col. 5, lines 19-31; see also disclosure of the agent programs, and particularly the management reports agent, col. 11, lines 31-60; see discussion of temporary constraints at col. 11, lines 36-40 and 45-49);

c) creating a job model location within the database for storing a description of the job and its components, including job segments (see object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18);

d) receiving from the production monitor controller information that describes the job and its components, including descriptions of job segments of the job that conform to the capability and constraint attributes of the finishing device (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18); and

e) storing the description of the job and its components, including job segments, in the job model location within the database (see object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

15. Regarding claim 28, **Marlin et al.** teaches a virtual finishing job ticket database comprising:

a) job construction data (see object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18);

b) control data for automated instruction of at least one finishing device (see process object 38 in Figure 7; see also col. 11, lines 15-18); and

c) integrity data used after performance of the finishing device in order to confirm that the job was finished in accordance with the job construction data (see disclosure that prior art systems included an error recovery operation such that if a job is completed without incident, that can be recorded, col. 3, lines 43-45).

16. Regarding claim 29, **Marlin et al.** additionally teaches a virtual finishing job ticket database wherein the job construction data, control data and integrity data are stored in hierarchically arranged nodes of information (see Figure 10B; see also col. 17, lines 17-26).

17. Regarding claim 30, **Marlin et al.** additionally teaches a virtual finishing job ticket database further comprising retrieving from the database an entire virtual finishing job ticket from information provided by a single job segment identifier (see disclosure of the MIF meta-data tree, defining a product object, analogous to the claimed entire virtual finishing job ticket, Figure 10B; see also in cited prior art document "Large Mailing Operations Standards Specification, Version 1.0", published 31 October 1994, incorporated by reference by the **Marlin et al.** patent at col. 5, lines 42-46, the fact that Mail Job Objects, and specifically Print Job Entries, each contain a Product Name object and a Product Instance Qualifier object, the combination of which is necessary to insure

unique key access to table entries in the Product Object table at page 37, thus providing the claimed functionality).

18. Regarding claim 2, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving job description information comprises receiving a description of finishing operations for a job comprising printed sheet workpieces (see col. 4, lines 16-38, particularly lines 21-24; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

19. Regarding claim 3, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving finishing job description information comprises receiving such information from a production monitor controller (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

20. Regarding claim 4, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving comprises receiving reference pointers to locations where some specific job description information is stored (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

21. Regarding claim 5, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database further comprising arranging finishing job description information in a hierarchical manner (see Figure 10B; see also col. 17, lines 17-26).

22. Regarding claim 6, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of arranging further comprises arranging in a hierarchical tree structure (see Figure 10B; see also col. 17, lines 17-26).

23. Regarding claim 7, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of arranging in a hierarchical manner further comprises including, within at least one node at each level within the hierarchy of nodes, reference pointers to at least one node at a different level in the hierarchy such that all nodes of a job are referenced by at least one other node within the hierarchy arrangement of nodes (see Figure 10B; see also col. 17, lines 17-26).

24. Regarding claim 8, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of arranging further comprises arranging a top level node comprising job identification data (see disclosure that the concept of components includes mail jobs, col. 12, lines 28-31; see also col. 13, lines 9-18; see also Figure 10B; see also col. 17, lines 17-26).

25. Regarding claim 9, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of arranging a top level node further comprises including within the top level node reference pointers to at least one node at a hierarchical level below the top level (see Figure 10B; see also col. 17, lines 17-26).

26. Regarding claim 10, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database, further comprising including at least one node within the hierarchy of nodes in which one of a pre-designated list of document forms is identified as applying to a document to be finished during the finishing job (see disclosure that the concept of components includes mail jobs, col. 12, lines 28-31; see also col. 13, lines 9-18; see also disclosure of the object class, mail job object class, process object class and finishing object class, col. 11, lines 5-27; see also Figure 10B; see also col. 17, lines 17-26).

27. Regarding claim 11, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database, further comprising using a reference pointer within at least one node to a list of attributes of the identified document form, which list is stored outside of the node itself (see Figure 10B; see also col. 17, lines 17-26; see also disclosure of the object class, mail job object class, process object class and finishing object class, col. 11, lines 5-27).

28. Regarding claim 12, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving comprises receiving from the production monitor controller job model information comprising information associated with possible threads for production of the finishing job (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and particularly the process object 38 in Figure 7; see also col. 11, lines 1-18).

29. Regarding claim 13, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving job model information further comprises receiving

build sequence information for production of the finishing job (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and particularly the process object 38 in Figure 7; see also col. 11, lines 1-18).

30. Regarding claim 14, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving build sequence information includes receiving information for programming operation of at least one finishing device to be used during the finishing job (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and particularly the process object 38 in Figure 7; see also col. 11, lines 1-18).

31. Regarding claim 15, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of storing further comprises storing information for different job segments in different nodes within a hierarchy of nodes (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18; see also disclosure that the concept of components includes mail jobs, col. 12, lines 28-31; see also col. 13, lines 9-18; see also Figure 10B; see also col. 17, lines 17-26).

32. Regarding claim 16, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of storing further comprises storing information in a plurality of nodes at the same level within a hierarchy of nodes (see disclosure that the concept of components includes mail jobs, col. 12, lines 28-31; see also col. 13, lines 9-18; see also Figure 10B; see also col. 17, lines 17-26).

33. Regarding claim 17, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving further comprises receiving information associated with job segments produced by different production equipment and wherein the step of storing further comprises storing information describing such different job segments in different nodes of the virtual finishing job ticket database (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18; see also disclosure that the concept of components includes mail jobs, col. 12, lines 28-31; see also col. 13, lines 9-18; see also Figure 10B; see also col. 17, lines 17-26).

34. Regarding claim 18, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database further comprising creating an information node within the virtual finishing job ticket database wherein descriptive information of a job segment is stored, such as job segment comprising a combination of a plurality of job segments produced by different production equipment (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18; see also disclosure that the concept of components includes mail jobs, col. 12, lines 28-31; see also col. 13, lines 9-18; see also Figure 10B; see also col. 17, lines 17-26).

35. Regarding claim 19, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving further comprises receiving the finishing job description information from a production monitor controller (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

36. Regarding claim 20, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database further comprising providing access to the stored finishing job description information to a finishing module controller (see col. 5, lines 7-32).

37. Regarding claim 21, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database further comprising associating the stored finishing job description information regarding at least one job segment with a job segment identifier code such that such stored information can be accessed through use of the job segment identifier code (see col. 12, lines 46-59; see also col. 13, lines 9-18).

38. Regarding claim 22, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving further comprises receiving a digital copy of a virtual finishing job ticket (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

39. Regarding claim 23, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of storing capability and constraint attributes comprises storing capability and constraint attributes for all finishing devices usable for the finishing job (see disclosure of the finishing object, col. 11, lines 21-27; see also col. 13, lines 9-30).

40. Regarding claim 24, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the availability of a finishing device is one of the attributes stored in the virtual finishing job ticket database (see col. 11, lines 40-60).

41. Regarding claim 25, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving comprises receiving data for controlling at least one finishing device (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18).

42. Regarding claim 26, **Marlin et al.** additionally teaches a method for a virtual finishing job ticket database wherein the step of receiving comprises receiving integrity data used after performance of the finishing device in order to confirm that the job was finished in accordance with the job description data (see col. 4, lines 16-38; see also object class 35, mail job object 36, mail piece object 37 and process object 38 in Figure 7; see also col. 11, lines 1-18; see also disclosure that prior art systems included an error recovery operation such that if a job is completed without incident, that can be recorded, col. 3, lines 43-45).

Response to Arguments

43. Applicant's arguments filed 16 December 2005 have been fully considered but they are not persuasive.

44. Regarding the Applicants' argument that the newly added limitation that both temporary and permanent constraints are included in the finishing device attributes distinguishes over the **Marlin et al.** reference, the examiner respectfully responds that at col. 11, lines 36-49, the reference discloses the use of a supplies management agent which manages supplies needed for operations, such as postage, toner for printers, paper, etc., and furthermore that a management reports agent obtains management information relating to the scheduling of mail jobs, "so that, for example, if one printer line is down, the mail job may be scheduled into the workflow for another printer line."

The claimed 'temporary constraints' is anticipated by (at least) the disclosed "information related to the scheduling of mail jobs...so that...if one printer line is down, the mail job may be scheduled into the workflow for another printer line" (col. 11, lines 45-49).

45. Regarding the Applicants' argument that the **Marlin et al.** reference fails to teach the claimed integrity data, the examiner respectfully disagrees.

As noted by the Applicants, the **Marlin et al.** reference discloses a prior art system that "provides an error recovery operation such that if a job is completed without incident that can be recorded." The Applicants claim "integrity data used after performance of the finishing device in order to confirm that the job was finished in accordance with the job control data".

Given the breadth of the limitation ("used...to confirm that the job was finished in accordance with the job control data"), it is anticipated by the disclosure that the fact that a job was completed 'without incident'. The fact that **Marlin et al.'s** disclosure is made in the context of an error recovery operation means that 'without incident' is analogous to 'without error', a condition clearly conforming to the claimed 'in accordance with the job control data'.

Conclusion

46. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

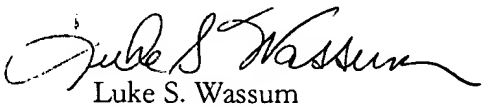
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke S. Wassum whose telephone number is 571-272-4119. The examiner can normally be reached on Monday-Friday 8:30-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R. Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

In addition, INFORMAL or DRAFT communications may be faxed directly to the examiner at 571-273-4119. Such communications must be clearly marked as INFORMAL, DRAFT or UNOFFICIAL.

Customer Service for Tech Center 2100 can be reached during regular business hours at (571) 272-2100, or fax (571) 273-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Luke S. Wassum
Primary Examiner
Art Unit 2167

lsw
30 January 2006